

REMARKS

I. Status of the Application and Claims

With entry of this amendment, claims 1-3 and 5-38 are pending in the application. Claims 4 and 39-56 have been canceled. Claims 1-3 and 5-38 have been rejected.

Applicants have amended claims 1-3 and 5 solely to more particularly claim the subject matter therein. Claims 1 has been amended to replace “at least 300” with “300 or more” language. Claims 5 has been amended to replace “at least 30” with “35 or more” language. Support for these amendments are found in the specification as filed. For example, at page 14, lines 3-14, page 88, lines 3-10, and page 90, lines 6-21. Claim 2 has been amended to recite the entire SEQ ID No. 2 or an isolated nucleic acid of complementary sequence thereof. No new matter has been added.

Claim 3 has been amended to recite the “at least 20” language of claim 3 as originally filed and to also add the proviso “and provided that the consecutive polynucleotides do not comprise the sequence GCCTC CCAAA GTGCT GGGAT TACAG GCAT.” Support for this amendment can be found in the specification as filed. For example, p. 90, lines 6-8, discloses that the probes or primers according to the invention comprise at least 8 consecutive nucleotides of a nucleic acid chosen from SEQ ID Nos. 1 to 8, or of a nucleic acid of complementary sequence. Also for example, SEQ ID Nos. 1 and 3 specifically disclose the sequence GCCTC CCAAA GTGCT GGGAT TACAG GCAT at nucleotides 1198-1227. Moreover, examples of polynucleotides according to the invention comprising at least 8 consecutive nucleotides of SEQ ID No. 1, are further exemplified, for example, by SEQ ID Nos. 2 to 8, and by examples at page 90, lines 9-21.

Applicants respectfully submit that *In re Johnson*, 558 F.2d 1008 (C.C.P.A. 1977) provides legal precedent for this proviso. *Johnson* provides that a “broad and complete generic disclosure, coupled with extensive examples fully supportive of the limited genus now claimed” supports the exclusion of specific compounds also disclosed. *In re Johnson* 558 F.2d at 1018. In *Johnson*, a broad class of precursor compounds was recited including 26 specific examples. An added proviso excluded certain compounds to provide a limited genus, where 14 examples fell within the scope of the limited genus. The court in *Johnson* held that the written description supported the broader genus, and “having described the whole, necessarily described the part remaining.” *Id.* at 1019.

In the present specification, a class of polynucleotides comprising at least 8 consecutive nucleotides of SEQ ID No. 1 or 3 was disclosed. Additionally, numerous examples of these compounds were set forth in the specification, which are representative of the entire range of polynucleotides set forth in the claims. The specification and claims as originally filed set forth the specific polynucleotide sequences that are excluded by the added proviso of claim 3. As in *Johnson*, this fact provides sufficient evidence that Applicants considered the subject matter of the presently claimed invention to be within the scope of their invention, and the added proviso is not new matter.

II. Anticipation Rejections under 35 U.S.C. § 102

The Office rejected claim 2 under 35 U.S.C. § 102(b) as being anticipated by *Auffray et al.*, C. R. Acad. Sci. 318:263-272 (“*Auffray*”). Office Action, pages 2-3. Applicants traverse the rejection because *Auffray* does not teach all the limitations of the instant claim.

The Office asserts that *Auffray* anticipates claim 2 because *Auffray* allegedly discloses a “sequence of a cDNA clone” comprising “greater than 20 contiguous nucleotides of SEQ ID NOS: 2, 4 and 5.” *Id.*, page 2.

Applicants point out that claim 2 is dependent upon claim 1. Therefore, claim 2 includes all limitations recited in claim 1. *Auffray* does not anticipate claim 2 as currently amended because *Auffray* discloses only a portion of the polynucleotide of SEQ ID NO. 2, and does not disclose “the isolated nucleic acid according to claim 1” as recited in claim 2. For example, *Auffray* does not disclose “a polynucleotide comprising 300 consecutive nucleotides of the nucleotide sequence SEQ ID No. 1” as recited in claim 1. Accordingly, *Auffray* does not anticipate the claimed invention because it does not teach all of the limitations of the instant claim. Applicants respectfully request reconsideration and withdrawal of the rejection.

III. Written Description Rejection Under 35 U.S.C. § 112, first paragraph

The Office rejected claims 1, 3 and 5-38 under 35 U.S.C. § 112, first paragraph for failing to comply with the written description requirement because the claims allegedly contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Office Action, pages 3-4. The Office alleges that “[t]here is no literal support in the specification as originally filed for the specific ranges recited in the amended claims.” *Id.* Applicants traverse the rejection and point out disclosures in the specification that support the claims as currently amended.

Claim 3 has been amended to recite its original as-filed language of “at least 20”. Accordingly, the rejection of this claim is now moot.

Claim 1 recites “a polynucleotide having 300 or more consecutive nucleotides of the nucleotide sequence SEQ ID No. 1.” Support for this amendment is found in the application as filed. For example, amplified polynucleotide fragments of the invention of approximately 300 nucleotides in length of the sequence SEQ ID No. 1 or of a complementary sequence are disclosed at page 88, lines 7-10. And for example, page 90, lines 9-21, provides examples of polynucleotides having more than 300 consecutive nucleotides of the nucleotide sequence SEQ ID No. 1 or of a complementary sequence. Accordingly, one of skill in the art would understand that the specification discloses a polynucleotide having 300 or more consecutive nucleotides of the nucleotide sequence SEQ ID No. 1 or of a complementary sequence.

Similarly, claim 5 recites “a polynucleotide which has 35 or more consecutive nucleotides of the sequence SEQ ID No. 5.” Support for this amendment is found in the application as filed. For example, page 90, lines 9-21, provides examples of polynucleotides having 35 or more consecutive nucleotides of the sequence SEQ ID No. 5 or of a complementary sequence. Accordingly, one of skill in the art would understand that the specification discloses a polynucleotide which has 35 or more consecutive nucleotides of the sequence SEQ ID No. 5 or of a complementary sequence.

IV. Indefiniteness Rejection Under 35 U.S.C. § 112, second paragraph

The Office rejected claim 2 under 35 U.S.C. § 112, second paragraph, as being indefinite because the phrase "...a polynucleotide of the sequence of SEQ ID NO: 2" is allegedly unclear. Office Action, page 4. The Office states that the "phrase can be interpreted to specify the polynucleotide comprises either the entire sequence of SEQ ID NO: 2 or only a portion of SEQ ID NO: 2."

Applicants disagree with the rejection. In order to advance prosecution of the application, however, Applicants amend claim 2 solely to more particularly describe the subject matter of the invention. Claim 2 has been amended to recite "a polynucleotide of the entire sequence of SEQ ID No. 2, or an isolated nucleic acid of complementary sequence." and thus is not indefinite in scope.

Applicants respectfully request reconsideration and withdrawal of the rejection.

SUMMARY

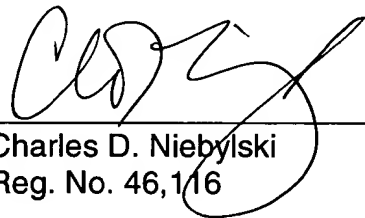
In view of the above amendments and remarks, Applicants submit that this application is in condition for allowance. An early and favorable action is earnestly solicited.

Please grant any extensions of time required to enter this amendment and response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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